

A CASE OF FRAGILITAS OSSIUM, WITH MULTIPLE
FRACTURES AND VICIOUS UNION;
DEFORMITIES CORRECTED BY
OSTEOTOMY.

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J. F., aged eighteen years, October 28, 1890, fell on the sidewalk, and broke his right femur near the middle. He was taken to the Long Island College Hospital, where I saw him soon after admission. At ten years of age the same bone had been broken somewhat nearer the lower end. The bones of the thighs and legs of this patient were all very much deformed. The lower ends of both thigh bones were bent considerably backward, making an angular displacement near their middle. The right femur had been broken just above this bend. Both legs were bent backward so as to make at their middle an angle of more than forty-five degrees; and the toes of both feet were pointing almost directly downward. I was told that the bones of the legs had been broken, and that the fragments had united without treatment. The boy's father told me that his son had always had poor health, and that he had been subject to fits and convulsions, and that this was the cause of his crooked bones.

After the repair of the broken thigh bone, the boy took up the idea of an operation upon his legs; he wanted them straightened. I told his father that the result of an operation was doubtful, and might lead to an amputation of the legs. The boy said that he would rather lose his legs than remain as he was. My conclusion was to operate on one leg at a time.

The first operation was performed on the left leg, January 13, 1891. A longitudinal incision was made along the crest of the tibia over the angle of projection, about five inches in length, and the soft parts dissected from the sides of the bone far enough to permit

the saw to cut through it; then the fibula was infracted by force. About four inches of the bent part of the tibia was sawed out, part from the upper fragment and part from the lower. The broken ends of the pieces of the fibula were cut off, so as to permit the pieces of the tibia to be adjusted evenly, in order to make the leg straight. To attain this end several slices of the bones were cut off. The cut ends of the pieces of the tibia were adjusted and wired together with knee-pan wire. The wound was closed and drained, and all was put on a splint of peculiar construction. Union was very slow, taking five or six months. I removed the wire the next October.

In the first week of June, 1891, while going about the yard of the hospital on crutches, he fell and broke his right femur again near the seat of the previous fracture. The process of repair took place in about six or seven weeks. It is worthy of mention that he was an inveterate smoker; I urged him to stop smoking, as it was doing him harm: he left it off, and has not smoked since, his general health having improved in the meantime. About the 1st of August, 1891, while in the surgical ward of the hospital, he fell and broke his right femur once more. The same treatment as employed before was carried out; the limb was laid on and over a pillow, making the thigh as straight as possible under the circumstances; and a traction weight of about six pounds was applied in the usual way. Union took place in about five or six weeks.

The operation on the right leg was performed January 13, 1892, and the steps were similar to those of the one of the previous year. In this instance the fibula had fused with the tibia, and did not require a separate exsection. The same kind of wire was used as before. The wound was closed more completely than in the previous case, by means of deep sutures, thus assuring more speedy union of the soft parts. There was good union of the pieces of bone in about two months.

The splint used in both instances was my modification of Dupuytren's splint for Pott's fracture of the leg. It had a piece of wire-cloth fastened to the posterior edge, and bent up so as to make a trough splint. The board-piece came on the inside of the leg. The apparatus had posterior and external splints, as it were; while the foot-piece supported the foot and the lower fragment of the leg.